

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE

THE NIELSEN COMPANY (US), LLC, )  
Plaintiff, )  
v. ) C.A. No. 22-1345-CJB  
TVISION INSIGHTS, INC., ) **DEMAND FOR JURY TRIAL**  
Defendant. )

**AMENDED ANSWER TO COMPLAINT FOR PATENT INFRINGEMENT**

Defendant TVision Insights, Inc. (“TVision”), by and through counsel, demands a trial by jury on all issues so triable and answers the Complaint for Patent Infringement filed by Plaintiff The Nielsen Company (US), LLC (“Nielsen”) as follows:

## **NATURE OF THE ACTION**

1. TVision admits that this purports to be an action for patent infringement brought against TVision for alleged infringement of United States Patent No. 11,470,243 (“the ’243 patent”). To the extent that this paragraph alleges that TVision has infringed any valid and enforceable claims of the ’243 patent, TVision denies those allegations.

## PARTIES

2. TVision lacks knowledge or information sufficient to form a belief as to the truth of the allegations in paragraph 1 and on that basis denies the allegations.

3. TVision admits that TVision Insights, Inc. is organized and existing under the laws of the State of Delaware.

## **JURISDICTION AND VENUE**

4. TVision admits that this purports to be an action for patent infringement arising under the patent laws of the United States, 35 U.S.C. §§ 1 *et seq.* TVision further admits that this Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and

1338(a) inasmuch as the Complaint purports to state claims for patent infringement arising under the patent laws of the United States.

5. TVision admits that this Court has personal jurisdiction over it, and that TVision is a corporation organized and existing under the laws of the State of Delaware. TVision admits that it has a registered agent in Delaware—The Corporation Trust Company, 1209 Orange Street, Wilmington, DE 19801. The remaining allegations of paragraph 5 set forth legal conclusions and questions of law regarding personal jurisdiction to which no response is required. To the extent a response is required, such allegations are denied.

6. TVision admits that venue is proper in this Judicial District. The remaining allegations of paragraph 6 are legal conclusions for which no response is required. To the extent a response is required, except as expressly admitted, such allegations are denied.

#### **FACTUAL BACKGROUND**

7. TVision denies that Nielsen is the media industry's leading data and analytics company. TVision lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations in paragraph 7 and on that basis denies the allegations.

8. TVision lacks knowledge or information sufficient to form a belief as to the truth of the allegations in paragraph 8 and on that basis denies the allegations.

9. TVision lacks knowledge or information sufficient to form a belief as to the truth of the allegations in paragraph 9 and on that basis denies the allegations.

#### **THE ASSERTED PATENT**

10. TVision admits that the '243 patent on its face is entitled "Methods and Apparatus to Capture Images," and further admits that what appears to be a copy of the '243 patent is attached to the Complaint as Exhibit A. TVision admits that the '243 patent on its face lists "October 11, 2022" as the date of patent. TVision lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations of paragraph 10, and on that basis, except as herein expressly admitted, denies those allegations.

11. TVision admits that the '243 patent on its face lists "The Nielsen Company (US), LLC" as the assignee. The remaining allegations of paragraph 11 set forth legal conclusions and questions of law under the Patent Act, 35 U.S.C. § 1 *et seq.*, to which no response is required. To the extent a response is required, except as herein expressly admitted, such allegations are denied.

12. TVision admits that methods and apparatuses for audience measurement may involve determining information about audience members, including comparing data about heads or faces to reference information. TVision denies the allegations of paragraph 12 insofar as they purport to characterize the subject matter and scope of the asserted patent. TVision lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations of paragraph 12, and on that basis, except as herein expressly admitted, denies those allegations.

13. TVision admits that paragraph 13 appears to reproduce some portions of language from the '243 patent. Except as herein expressly admitted, TVision denies the allegations of paragraph 13 insofar as they purport to characterize the subject matter and scope of the '243 patent.

14. TVision admits that what appears to be a copy of the declaration of Pierre Moulin is attached to the Complaint as Exhibit B. The remaining allegations of paragraph 14 set forth legal conclusions and questions of law to which no response is required. To the extent a response is required, except as herein expressly admitted, such allegations are denied.

15. TVision admits that certain audience measurement systems may collect a series of images of a media exposure environment over time and gather information about an environment from the series of images. TVision admits that the characteristics of certain audience measurement systems described in paragraph 15 are likewise described in the document attached as Exhibit B to the Complaint. TVision lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations of paragraph 15 and on that basis, except as herein expressly admitted, denies those allegations.

16. TVision admits that certain audience measurement systems may use facial recognition. TVision admits that the characteristics of certain audience measurement systems described in paragraph 16 are likewise described in the document attached as Exhibit B to the Complaint. TVision lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations of paragraph 16 and on that basis, except as herein expressly admitted, denies those allegations.

17. TVision admits that paragraph 17 appears to reproduce language from the document attached as Exhibit B to the Complaint. TVision lacks knowledge or information sufficient to form a belief as to the truth of the allegations of paragraph 17 and on that basis denies those allegations.

18. TVision admits that paragraph 18 appears to reproduce language from the document attached as Exhibit B to the Complaint. TVision denies the allegations of paragraph 18 insofar as they purport to characterize the subject matter and scope of the '243 patent. TVision lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations in paragraph 18 and on that basis denies the allegations.

19. TVision admits that paragraph 19 appears to reproduce language from the document attached as Exhibit B to the Complaint. TVision lacks knowledge or information sufficient to form a belief as to the truth of the allegations of paragraph 19 and on that basis denies those allegations.

20. TVision admits that paragraph 20 appears to reproduce language from the document attached as Exhibit B to the Complaint. TVision denies the allegations of paragraph 20 insofar as they purport to characterize the subject matter and scope of the '243 patent. TVision lacks knowledge or information sufficient to form a belief as to the truth of the allegations of paragraph 20 and on that basis denies those allegations.

21. TVision admits that Claim 4 of the '243 patent incorporates the limitations of Claim 1. TVision admits that paragraph 21 appears to reproduce language from the document attached as Exhibit B to the Complaint. TVision denies the allegations of paragraph 21 insofar

as they purport to characterize the subject matter and scope of the '243 patent and prior art. To the extent that the allegations of paragraph 21 set forth legal conclusions as to the priority date of the '243 patent, no response is required. To the extent a response is required, such allegations are denied. TVision lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations of paragraph 21 and on that basis denies those allegations.

22. TVision admits that paragraph 22 appears to reproduce language from the document attached as Exhibit B to the Complaint. TVision lacks knowledge or information sufficient to form a belief as to the truth of the allegations of paragraph 22 and on that basis denies those allegations

23. TVision admits that Claim 5 of the '243 patent incorporates the limitations of Claim 4. TVision lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations of paragraph 23 and on that basis denies those allegations.

24. TVision admits that paragraph 24 appears to reproduce language from the document attached as Exhibit B to the Complaint. TVision denies the allegations of paragraph 24 insofar as they purport to characterize the subject matter and scope of the '243 patent and prior art. TVision lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations of paragraph 24 and on that basis denies those allegations.

25. TVision admits that Claim 6 of the '243 patent incorporates the limitations of Claim 4. TVision lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations of paragraph 25 and on that basis denies those allegations.

26. TVision admits that paragraph 26 appears to reproduce language from the document attached as Exhibit B to the Complaint. TVision denies the allegations of paragraph 26 insofar as they purport to characterize the subject matter and scope of the '243 patent and prior art. TVision lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations of paragraph 26 and on that basis denies those allegations.

27. TVision admits that Claim 8 of the '243 patent incorporates the limitations of Claim 6. TVision lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations of paragraph 27 and on that basis denies those allegations.

28. TVision admits that Claim 11 of the '243 patent incorporates the limitations of Claim 9. TVision admits that paragraph 28 appears to reproduce language from the document attached as Exhibit B to the Complaint. To the extent that the allegations of paragraph 28 set forth legal conclusions as to the priority date of the '243 patent, no response is required. To the extent a response is required, such allegations are denied. TVision lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations of paragraph 28 and on that basis denies those allegations.

29. TVision admits that paragraph 29 appears to reproduce language from the document attached as Exhibit B to the Complaint. TVision lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations in paragraph 29 and on that basis denies those allegations.

30. TVision admits that Claim 12 of the '243 patent incorporates the limitations of Claim 11. TVision lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations of paragraph 30 and on that basis denies those allegations.

31. TVision admits that paragraph 31 appears to reproduce language from the document attached as Exhibit B to the Complaint. TVision lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations in paragraph 31 and on that basis denies those allegations.

32. TVision admits that Claim 13 of the '243 patent incorporates the limitations of Claim 12. TVision lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations of paragraph 32 and on that basis denies those allegations.

33. TVision admits that Claim 14 of the '243 patent incorporates the limitations of Claim 11. TVision lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations of paragraph 33 and on that basis denies those allegations.

34. TVision admits that paragraph 34 appears to reproduce language from the document attached as Exhibit B to the Complaint. TVision lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations in paragraph 34 and on that basis denies those allegations.

35. TVision admits that Claim 18 of the '243 patent incorporates the limitations of Claim 16. TVision admits that paragraph 35 appears to reproduce language from the document attached as Exhibit B to the Complaint. To the extent that the allegations of paragraph 35 set forth legal conclusions as to the priority date of the '243 patent, no response is required. To the extent a response is required, such allegations are denied. TVision lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations in paragraph 35 and on that basis denies those allegations.

36. TVision admits that paragraph 36 appears to reproduce language from the document attached as Exhibit B to the Complaint. TVision lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations in paragraph 36 and on that basis denies those allegations.

37. TVision admits that Claim 19 of the '243 patent incorporates the limitations of Claim 18. TVision lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations of paragraph 37 and on that basis denies those allegations.

38. TVision admits that paragraph 38 appears to reproduce language from the document attached as Exhibit B to the Complaint. TVision lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations in paragraph 38 and on that basis denies those allegations.

39. TVision admits that Claim 20 of the '243 patent incorporates limitations of Claim 19. TVision lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations of paragraph 39 and on that basis denies those allegations.

### **THE INFRINGING SYSTEM AND METHOD**

40. TVision admits that the quoted language in paragraph 40 appears in the documents attached as Exhibit C and Exhibit D to the Complaint. TVision admits that the language characterizing TVision as a “data and analytics company that measures how people [...] watch TV” appears in the document attached as Exhibit C to the Complaint. TVision admits that the video cited in paragraph 40 discusses collecting data from a panel of TV viewers that opt-in to be part of the panel. TVision denies the remaining characterizations and interpretations of the documents cited. Except as herein expressly admitted, TVision denies the allegations of paragraph 40.

41. TVision admits that the document attached as Exhibit E to the Complaint references “a 15,000 person panel.” TVision admits that the document attached as Exhibit G mentions “Boston, Chicago, Dallas, New York, Philadelphia, Atlanta, Seattle and Los Angeles” as markets TVision operates in. Except as herein expressly admitted, TVision denies the allegations of paragraph 41.

42. TVision admits that its audience measurement may involve using a system or employing a method. TVision denies that it has infringed any valid and enforceable claim of the ’243 patent. Except as herein expressly admitted, TVision denies the allegations of paragraph 42.

43. TVision admits that it uses a device placed in panelists’ homes. TVision admits that the device can collect certain data from panelists’ homes and that certain data can be analyzed. To the extent that this paragraph alleges that TVision has infringed any valid and enforceable claims of the ’243 patent, TVision denies those allegations. TVision lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations of paragraph 43, and on that basis, except as herein expressly admitted, denies those allegations.

44. TVision admits that it can collect and analyze data from its panel. TVision admits that insights into how people watch TV may include TV attribution, co-viewing, reach, frequency, and cross-platform measurement. TVision admits that the documents attached as

Exhibit H and Exhibit I to the Complaint discuss the use of data to provide insights such as TV attribution, co-viewing, reach, frequency, and cross-platform measurement. Except as herein expressly admitted, TVision denies the allegations of paragraph 44.

45. TVision admits that the document attached as Exhibit J includes the language quoted in the parenthetical in paragraph 45. TVision admits that the document attached as Exhibit K to the Complaint on its face is a U.S. Patent Application Publication bearing the publication number “2018/0007431” and lists TVision as the assignee. Except as herein expressly admitted, TVision denies the allegations of paragraph 45 and denies that TVision has infringed any valid and enforceable claim of the ’243 patent.

46. TVision admits that the quoted language appears in the document attached as Exhibit L to the Complaint. Except as herein expressly admitted, TVision denies the allegations of paragraph 46.

47. TVision admits that the quoted language appears in the document attached as Exhibit K to the Complaint. Except as herein expressly admitted, TVision denies the allegations of paragraph 47.

48. TVision admits that the quoted language appears in the document attached as Exhibit M to the Complaint. Except as herein expressly admitted, TVision denies the allegations of paragraph 48.

49. TVision admits that the video cited in paragraph 49 discusses use of a webcam mounted on a user’s television. TVision admits that the language quoted in the parenthetical in paragraph 49 appears in the document attached as Exhibit N to the Complaint. TVision denies that it has infringed any valid and enforceable claim of the ’243 patent. Except as herein expressly admitted, TVision denies the allegations of paragraph 49.

50. TVision admits that the document attached as Exhibit O to the Complaint discusses using a sensor to detect who is in the room. TVision admits that the quoted language in paragraph 50 appears in the YouTube video clip referred to as the “Sidhu Interview.” TVision admits that the screenshot in paragraph 50 appears in the video cited in paragraph 50. TVision

denies that it has infringed any valid and enforceable claim of the '243 patent. Except as herein expressly admitted, TVision denies the allegations of paragraph 50.

51. TVision admits that the quoted language in paragraph 51 appears in the YouTube video clip referred to as the "Sidhu Interview." TVision denies that it has infringed any valid and enforceable claim of the '243 patent. Except as herein expressly admitted, TVision denies the allegations of paragraph 51.

52. TVision admits that the quoted language in paragraph 52 appears in the YouTube video clip referred to as the "Sidhu Interview." TVision denies that it has infringed any valid and enforceable claim of the '243 patent. Except as herein expressly admitted, TVision denies the allegations of paragraph 52.

53. TVision admits that the quoted language in paragraph 53 appears in the YouTube video clip referred to as the "Sidhu Interview." TVision denies that it has infringed any valid and enforceable claim of the '243 patent. Except as herein expressly admitted, TVision denies the allegations of paragraph 53.

54. TVision admits that the document attached as Exhibit O to the Complaint references use of "facial recognition to detect who is in the room." Except as herein expressly admitted, TVision denies the allegations of paragraph 54.

55. TVision admits that the language quoted in the parenthetical in paragraph 55 appears in the document attached as Exhibit P to the Complaint. TVision admits that the language quoted in the parenthetical in paragraph 55 appears in a portion of the video clip of the Sidhu Interview. Except as herein expressly admitted, TVision denies the allegations of paragraph 55.

56. TVision admits that the language quoted in paragraph 56 appears in the document attached as Exhibit D to the Complaint. TVision admits that the document attached as Exhibit E to the Complaint mentions TVision licensing data and that "[m]any Nielsen contenders are licensing TVision's dataset[.]" TVision admits that it collects data from its panel and that the

data may be analyzed. Except as herein expressly admitted, TVision denies the allegations of paragraph 56.

57. Denied.

58. TVision denies that it has violated federal law. TVision denies that Nielsen is entitled to any relief.

**COUNT I**  
**INFRINGEMENT OF THE '243 PATENT**

59. TVision incorporates by reference its responses to paragraphs 1–58 above.

60. Denied.

61. Denied.

62. Denied.

63. Denied.

**PRAYER FOR RELIEF**

These paragraphs set forth the relief requested by Nielsen to which no response is required. TVision denies any allegations contained in the Prayer for Relief to which response is required. TVision denies that Nielsen is entitled to any relief requested in its Prayer for Relief in its Complaint, and further specifically denies that Nielsen is entitled to any relief whatsoever of any kind against TVision. TVision denies each and every allegation of Nielsen's Complaint not specifically admitted or otherwise responded to above. TVision specifically denies that it has infringed or is liable for infringement of any valid and enforceable patent claims by Nielsen.

WHEREFORE, TVision respectfully requests that the Court enter judgment in TVision's favor and against Nielsen on all of Nielsen's claims; that the Court declare that the '243 patent is invalid, unenforceable, and not infringed by TVision; that the Court award TVision their costs and attorneys' fees pursuant to 35 U.S.C. § 285; and that the Court award TVision such other relief as the Court deems appropriate.

**EXCEPTIONAL CASE**

On information and belief, this is an exceptional case entitling TVision to an award of its attorneys' fees incurred in connection with defending this action pursuant to 35 U.S.C. § 285, as a result of, inter alia, Nielsen's assertion of the '243 patent against TVision with the knowledge that TVision does not infringe any valid or enforceable claim of the '243 patent and/or that the '243 patent is invalid and/or unenforceable.

**DEMAND FOR TRIAL BY JURY**

Nielsen's demand for a trial by jury does not require a response. TVision demands a jury trial for all issues so triable.

**AFFIRMATIVE DEFENSES**

Subject to the responses above, TVision alleges and asserts the following defenses in response to Nielsen's allegations, undertaking the burden of proof only as to those defenses deemed affirmative defenses by law, regardless of how such defenses are denominated herein. All defenses are pled in the alternative and do not constitute an admission of liability or that Nielsen is somehow entitled to any relief whatsoever. In addition to the defenses listed below, TVision specifically reserves all rights under the Federal Rules of Civil Procedure to assert additional defenses and/or counterclaims that may become known through the course of discovery or otherwise during the course of these proceedings.

**FIRST DEFENSE**  
(NONINFRINGEMENT OF THE PATENT)

TVision has not infringed and does not infringe any valid, enforceable claim of the '243 patent, literally or under the doctrine of equivalents, indirectly, willfully, alone or jointly with third parties.

**SECOND DEFENSE**  
(INVALIDITY)

One or more of the claims of the '243 patent are invalid and unenforceable for failure to satisfy one or more of the conditions of patentability set forth in Title 35 of the United States Code, including without limitation, 35 U.S.C. §§ 101, 102, 103, and/or 112, because the claims

are directed to abstract ideas or other non-statutory subject matter, because the claims lack novelty, and are taught or suggested by the prior art, and because the claims suffer from a failure of written description, lack of enablement, and claim indefiniteness.

**THIRD DEFENSE**  
(LIMITATION ON DAMAGES)

Nielsen's damages are limited or unavailable pursuant to 35 U.S.C. §§ 286, 287, and/or 288.

**FOURTH DEFENSE**  
(NO INJUNCTIVE RELIEF)

Nielsen is not entitled to injunctive relief because it has an adequate remedy at law and, upon information and belief, otherwise cannot satisfy the requirements for injunctive relief.

**FIFTH DEFENSE**  
(ACQUIESCENCE, ESTOPPEL, WAIVER, AND/OR LACHES)

The claims and relief sought by Nielsen in relation to the '243 patent are barred, in whole or in part, by the equitable doctrines of acquiescence, estoppel and/or prosecution history estoppel, waiver, and/or laches.

**SIXTH DEFENSE**  
(INEQUITABLE CONDUCT)

Nielsen's claims are barred, in whole or in part, due to inequitable conduct on the United States Patent and Trademark Office (the "Patent Office") committed during the prosecution of the '243 patent by the named inventor, Christen Nielsen, prosecution counsel at the law firm Hanley, Flight & Zimmerman, LLC, such as James A. Flight, and one or more in-house intellectual property counsel at Nielsen<sup>1</sup> with responsibility over the prosecution of Nielsen's patent portfolio related to audience measurement systems, such as Thomas Strouse, Nielsen's Vice President & Intellectual Property Counsel. As a result of this inequitable conduct, the '243 patent is unenforceable.

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<sup>1</sup> For clarity and to avoid confusion with the plaintiff, TVision refers to Christen Nielsen in this section by full name, and references to "Nielsen" are to plaintiff.

On information and belief, as described in more detail below, Christen Nielsen, Nielsen's prosecution counsel, and/or Nielsen's in-house intellectual property counsel knew that at least some of the purported inventions claimed in the '243 patent were part of a basic audience measurement platform that was at least ten years old at the time of the '243 patent's claimed priority date, as is reflected in Nielsen's own prior patents and patent applications. With specific intent to deceive, Christen Nielsen, Nielsen's prosecution counsel, and/or Nielsen's in-house intellectual property counsel withheld this information, including prior art showing the unpatentability of a claim to this basic audience measurement platform, from the Patent Office during the prosecution of the '243 patent. The Patent Office would not have allowed one or more claims of the '243 patent, including at least the independent claims, had it been aware of the withheld information and prior art.

Specifically, Christen Nielsen, Nielsen's prosecution counsel, and/or Nielsen's in-house intellectual property counsel were well aware when Nielsen applied for the '243 patent that the technology claimed in at least the independent claims—namely 1, 9, 16, and 22, which cover an audience measurement device or method that both (1) used an audio signature of the media content to identify that content, and (2) analyzed images of the viewers in a household to determine their identity and facial orientation—was a basic, well-known platform (and was particularly well-known within Nielsen) that was *at least 10 years older* than the December 2011 priority date claimed by the '243 patent. Indeed, Nielsen's own patents, patent applications, and public disclosures made clear that such technology existed well before 2011.

As just one example, the March 1992 article, "Watching Americans Watch TV," published in *The Atlantic*<sup>2</sup>—a publication intended for consumption by a broad swath of the American public, not merely by those in the audience measurement field, such as Nielsen—discloses all the features of the basic audience measurement platform described above, as utilized at the time by Nielsen, except for using an audio signature of the media content to identify that

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<sup>2</sup> This article is attached hereto as Exhibit A, incorporated by reference herein, and viewable at <https://cdn.theatlantic.com/media/archives/1992/03/269-3/132675892.pdf>.

content. That feature, however, was already described—indeed, *patented*—by Nielsen almost 40 years ago in Nielsen’s U.S. Patent No. 4,677,466, which issued in June 1987 and was applied for in July 1985. For instance, the article in *The Atlantic* disclosed an “audience measurement system” including “memory,” “machine readable instructions,” and a “processor” called the passive meter, which sits next to an audience member’s television. The entire point of the device, as discussed at length in the article, is to determine who is watching a particular show; the system therefore must have obtained content-identifying data corresponding to the media content presented by the TV. The passive meter “scans the room every two minutes” to obtain a “fresh image.” Ex. A at 77. The meter then “locates the mélange of digits most resembling those for a human head.” *Id.* Thus, the passive meter analyzed a sequence of images in the media exposure environment to detect a head. The meter relies on “head-on or nearly head-on views” thus ensuring “that it will not count people who are present but involved in other activities, such as reading the newspaper or making love on the floor” (*id.*)—thus making clear that the meter determines a head orientation. In fact, the article’s author describes having seen Nielsen’s newest iteration of the passive matter in person (presumably courtesy of Nielsen), describing how it “can identify viewers and even gives a rough indication of whether their heads are turned toward the TV.” And the machine is trained, in advance, with images of potential audience members (“three head-on portraits and one quarter-profile”) to see whether, during presentation of the media content, it could “try matching the real [audience member] to these digital mugshots” (*id.*). Accordingly, the passive meter also determined audience identification information based on the match of a head to a known person associated with the media exposure environment. These passive meters were contemplated for deployment throughout the U.S. at so-called “Nielsen families” (“[t]he thing could appear in viewers’ homes fairly soon”), and so Nielsen contemplated and disclosed that such devices would use network interface circuitry to output a signal indicative of the content identifying data and the audience identification information to a data collection facility.

Further examples can be found in Nielsen's U.S. Patent Application Publication No. 2002/0010919 ("the Lu '919 publication"), which was published in 2002 based on an application filed in September 2001 and which discloses a TV audience measurement system comprising means to detect audio signatures by capturing audio of the program being played for the audience and then identifying the program by comparing the signature to a set of reference signatures; and Nielsen's U.S. Patent No. 4,858,000 ("Lu 1988"), which was filed for in September 1988 and is incorporated by reference into the Lu '919 publication and which discusses an audience measurement system that can identify members of a household and determine their heads orientation. These were Nielsen's own patents and published patent applications, filed more than ten years before the claimed priority date for the '243 patent, which shows that the basic audience measurement platform covered by the independent claims of the '243 patent was well-known, especially to those who worked at or for Nielsen, and no longer patentable in December 2011 or later.

On information and belief, as described further below, Christen Nielsen, Nielsen's prosecution counsel, and/or Nielsen's in-house intellectual property counsel knew not only that the basic audience measurement platform covered by the independent claims of the '243 patent was well-known and not patentable, they also specifically knew of at least four material prior art publications that reflected the basic, well-known audience measurement platform described above and that anticipated and/or rendered obvious at least all of the independent claims of the '243 patent—claims 1, 9, 16, and 22. These material prior art references include at least: (1) Nielsen's own prior U.S. Patent No. 7,882,514 ("the '514 patent"), which names Christen Nielsen as an inventor and issued on February 1, 2011; (2) Nielsen's own prior U.S. Patent Application Publication No. 2010/0274372 ("the '372 publication"), which also names Christen Nielsen as an inventor and was published on October 28, 2010; and (3) Nielsen's own prior U.S. Patent Application Publication No. 2002/0059577 ("the Lu '577 publication"), which names Nielsen employees Daozheng Lu, Paul Kempter, and William Feininger as inventors and was published on May 16, 2002; and (4) and Nielsen's own prior U.S. Patent Application Publication

No. 2002/0010919 (“the Lu ’919 publication”), which also names Nielsen employees Daozheng Lu, Paul Kempfer, and William Feininger as inventors and was published on January 24, 2002, and which is a divisional of the same application leading to the Lu ’577 publication and thus contains substantially the same disclosure as the Lu ’577 publication. As described in more detail below, Christen Nielsen, Nielsen’s prosecution counsel, and/or Nielsen’s in-house intellectual property counsel failed to disclose these material prior art references to the Patent Office during prosecution of the ’243 patent despite having a duty of disclosure, and, on information and belief, did so with specific intent to deceive the Patent Office into issuing the ’243 patent. On information and belief, the Patent Office would not have allowed one or more claims of the ’243 patent, including at least all of the independent claims (i.e., claims 1, 9, 16, and 22), had it been aware of the withheld prior art.

Importantly, this is not merely a case of individuals involved in prosecution of a patent withholding specific known prior art references; it is also a situation where it would have been common knowledge to those familiar with Nielsen’s decades-old audience measurement platform and its various iterations that independent claims 1, 9, 16, and 22 of the ’243 patent could not possibly be valid, and, as described herein, Nielsen’s in-house intellectual property counsel, outside prosecution counsel at Hanley, Flight & Zimmerman, and/or Christen Nielsen were all well aware of Nielsen’s existing audience measurement platform and its iterations and could have easily disclosed at least the above-cited prior art references (among others) if they so desired and if they intended to fulfill their duty of candor.

Nielsen and its prosecution counsel, Hanley, Flight & Zimmerman, LLC, in cooperation with the named inventor, Christen Nielsen, filed the application leading to the ’243 patent on May 23, 2022. On information and belief, both Christen Nielsen and prosecution counsel at Hanley, Flight & Zimmerman, LLC were involved in prosecuting the application leading to the ’243 patent and had a duty to disclose to the Patent Office all information known to them to be material to patentability. That duty continued throughout the pendency of all claims in the application leading to the ’243 patent. In addition, on information and belief, Nielsen employed

and/or currently employs in-house intellectual property counsel who was deeply involved in **both** the prosecution of Nielsen's patent portfolio related to audience measurement systems, including at least the '243 patent, **and** the litigation of the '243 patent against TVision. It is apparent that such in-house intellectual property counsel exist because there was a high degree of coordination between the prosecution of the '243 patent and the filing of the complaint in this case, as reflected by the fact that the '243 patent issued just **one** day before the 21-page complaint in this case was filed, which was accompanied by 240 pages of exhibits, including a 15-page expert report and nearly 50 pages of claim charts purporting to map the elements of claims 1, 4-6, 8-9, 11-14, 16, and 18-20 of the '243 patent to the accused TVision instrumentalities. On information and belief, it was not possible for Nielsen's outside litigation counsel at Kelley, Drye & Warren LLP who filed the complaint in this case to have conducted a reasonable pre-filing investigation pursuant to their obligations under Rule 11 of the Federal Rules of Civil Procedure in the less than 24 hours between issuance of the '243 patent and the filing of the complaint in this case. Accordingly, Nielsen's outside litigation counsel at Kelley, Drye & Warren, LLP must have begun working on the complaint well before the day it was filed and during the time that the '243 patent was still undergoing prosecution. However, Nielsen's outside litigation counsel did not coordinate directly with Nielsen's outside prosecution counsel at Hanley, Flight & Zimmerman, LLC because such coordination would have violated protective order provisions entered in other pending cases filed by Nielsen against TVision (provisions to which Nielsen's outside litigation counsel at Kelley, Drye & Warren, LLP were subject), and because Nielsen's outside litigation counsel has represented that they were not involved in the prosecution of the '243 patent. Accordingly, Nielsen must have had in-house intellectual property counsel who coordinated between Nielsen's outside litigation counsel at Kelley, Drye & Warren, LLP and outside prosecution counsel at Hanley, Flight & Zimmerman, LLC and must have known the key information known to each set of lawyers and must have approved of the decisions made and activities undertaken by each set of lawyers. On information and belief, Nielsen's in-house intellectual property counsel, such as Strouse, who signed the power of attorney associated with

the initial application, was substantively involved in the preparation and prosecution of the application leading to the '243 patent and therefore had the same duty to disclose as Christen Nielsen and prosecution counsel at Hanley, Flight & Zimmerman, LLC. That duty continued throughout the pendency of all claims in the application leading to the '243 patent.

The Patent Office issued the '243 patent on October 11, 2022. Between May 23, 2022 and October 11, 2022, Christen Nielsen, Nielsen's prosecution counsel, and/or Nielsen's in-house intellectual property counsel had at least the right and opportunity to comment on, and suggest changes to, the application leading to the '243 patent. At least two information disclosure statements were submitted to the Patent Office during the pendency of the application leading to the '243 patent, on May 27, 2022 and on June 6, 2022, purporting to identify references pursuant to the applicants' ongoing duty to disclose all information known to them to be material to patentability.

On information and belief, Christen Nielsen, Nielsen's prosecution counsel, and/or Nielsen's in-house intellectual property counsel deliberately decided to withhold the material information and prior art known to them and discussed above, and instead selectively disclosed only certain, potentially less relevant prior art information.

Moreover, on information and belief, Nielsen—including at least its in-house intellectual property counsel and its outside prosecution counsel at Hanley, Flight & Zimmerman LLC—knew at least as of October 11, 2022, the issuance date of the '243 patent, that independent claims 1, 9, 16, and 22, were very likely invalid. Despite going to the effort and expense of filing a new continuation application that included these independent claims (i.e., the application resulting in the '243 patent), the very next day after the patent issued—i.e., October 12, 2022—Nielsen filed this litigation, asserting the newly issued '243 patent, but conspicuously elected not to assert independent claims 1, 9, 16, and 22 against TVision. Nielsen instead elected to assert only significantly narrower *dependent* claims that depend from these independent claims. On information and belief, the only reason to assert these dependent claims against TVision but *not* the corresponding independent claims (which would necessarily make for an easier showing

when attempting to prove infringement) is that Nielsen itself—including at least its in-house intellectual property counsel and its outside prosecution counsel at Hanley, Flight & Zimmerman LLC—was aware that the independent claims are invalid. And if Nielsen—including at least its in-house intellectual property counsel and its outside prosecution counsel at Hanley, Flight & Zimmerman, LLC—knew this on October 12, 2022, when it initiated this lawsuit against TVision, it also knew this earlier, when the '243 patent was still in prosecution. On information and belief, Nielsen—including at least its in-house intellectual property counsel and its outside prosecution counsel at Hanley, Flight & Zimmerman, LLC—knew this on May 23, 2022 when it first applied for the '243 patent, at which time it was being advised by the same outside litigation counsel, the same outside prosecution counsel at Hanley, Flight & Zimmerman, LLC, and the same in-house counsel that it had when it filed this lawsuit.

These facts show that Nielsen—including at least its in-house intellectual property counsel and its outside prosecution counsel at Hanley, Flight & Zimmerman, LLC—deliberately decided to withhold the material information and prior art references discussed above, including at least the '514 patent, the '372 publication, the Lu '577 publication, and the Lu '919 publication, with an intent to deceive the Patent Office into issuing the '243 patent.

#### ***The '514 Patent***

As noted above, the '514 patent names Christen Nielsen as an inventor and issued on February 1, 2011. The '514 patent is therefore prior art to the '243 patent at least under 35 U.S.C. § 102(a). The '514 patent generally relates to audience measurement systems. In particular, the '514 patent discloses and describes systems for in-home measurement of a television viewing audience. For example, the '514 patent discloses and describes a people meter or metering unit that enables detecting the identities and number of people currently viewing a program displayed on a television. The metering unit is associated with a particular television or similar display device in a household, and may be equipped with or associated with sensors including a microphone that is placed in proximity to the display device and receives audio signals corresponding to the program being displayed on the television. In what the '514

patent describes as a well-known technique, the system can generate and process audio signatures corresponding to the audio component of a television program (e.g., as captured by the microphone), which can uniquely identify the program being presented on the television by comparing the signature to reference signatures corresponding to known content. The '514 patent expressly incorporates by reference other patent applications, such as U.S. patent application Serial No. 09/427,970, that disclose audio signature extraction and correlation techniques.

The '514 patent is but-for material to the issuance of the '243 patent and non-cumulative of other prior art considered and/or cited during prosecution in that, on information and belief, the Patent Office would not have allowed at least one claim of the '243 patent—e.g., at least independent claims 1, 9, 16, and/or 22—had it been aware of the '514 patent. For example, claim 1 of the '243 patent recites an “audience measurement system” comprising “memory,” “machine readable instructions,” and “processor circuitry to execute the machine readable instructions to” carry out certain steps. Those steps include “generat[ing] an audio signature of media content presented by a television within the media exposure environment” and “obtain[ing] content identifying data corresponding to the presented media content, the content identifying data based on the audio signature of the media content presented by the television within the media exposure environment.” The '514 patent discloses and/or renders obvious these limitations. For instance, the '514 patent discloses that exemplary embodiments of its system include an “audio signature processor” that is “is configured to generate and process audio signatures corresponding to the input audio signal 230.” The '514 patent further explains: “As is known, characteristics of the audio portion of presented program content may be used to generate a substantially unique proxy or signature (e.g., a series of digital values, a waveform, etc.) for that content. The signature information for the content being presented may be compared to a set of reference signatures corresponding to a known set of content. When a substantial match is found, the currently presented program content can be identified with a relatively high probability.” The steps in claim 1 of the '243 patent also include “analyz[ing] a

sequence of images of the media exposure environment to detect a head appearing in one or more of the images, the sequence of images obtained by a camera while the media content corresponding to the content identifying data is presented by the television,” “determin[ing] an orientation of the head with respect to the camera,” and “determin[ing] audience identification information based on a match of the head to a known person associated with the media exposure environment.” The ’514 patent discloses and/or renders obvious these limitations. For instance, the ’514 patent discloses that known examples of audience measurement systems often include a “people meter” that “may be located in the viewing space of the television and in communication with the home unit, thereby enabling the home unit to detect the identities and/or number of the persons currently viewing programs displayed on the television.” The ’514 patent further discloses that exemplary embodiments of its system “include[] a people meter 162 to capture information about the audience” watching a program on a television. Claim 1 of the ’243 patent further recites that the claimed “audience measurement system” comprises “network interface circuitry to output a signal indicative of the content identifying data and the audience identification information to a data collection facility.” The ’514 patent discloses and/or renders obvious this limitation. For instance, the ’514 patent discloses that, in exemplary embodiments of its system, a “metering unit 124 typically collects a set of viewing records and transmits the collected viewing records over a connection 140 to a central office or data processing facility (not shown).” Claim 1 of the ’243 patent further recites that the “audience measurement system” comprises “memory,” “machine readable instructions,” and “processor circuitry to execute the machine readable instructions.” The ’514 patent discloses and/or renders obvious these limitations as well. For instance, the ’514 patent discloses that an example embodiment of its system “includes a processor 2912 such as a general purpose programmable processor,” which “includes a local memory 2914, and executes coded instructions 2916 present in the local memory 2914 and/or in another memory device.” The entire disclosure of the ’514 patent is incorporated herein by reference.

***The '372 Publication***

As noted above, the '372 publication names Christen Nielsen as an inventor and was published on October 28, 2010. The '372 publication is therefore prior art to the '243 patent at least under 35 U.S.C. §§ 102(a) and 102(b).

The '372 publication is but-for material to the issuance of the '243 patent and non-cumulative of other prior art considered and/or cited during prosecution in that, on information and belief, the Patent Office would not have allowed at least one claim of the '243 patent—e.g., at least independent claims 1, 9, 16, and/or 22—had it been aware of the '372 publication. The '372 publication is the publication of non-provisional U.S. patent Appl. No. 12/831,870, which is a continuation of U.S. patent Appl. No. 11/576,328, which is the application that matured into the '514 patent. Because the '372 publication is the publication of a continuation of the application resulting in the '514 patent, it has a substantially identical disclosure as the '514 patent. Thus, the description and allegations set forth above of the '514 patent's disclosure is incorporated by reference as equally applicable to the '372 publication. The entire disclosure of the '372 publication is incorporated herein by reference.

***The Lu '577 Publication***

As noted above, the Lu '577 publication names Nielsen employees Daozheng Lu, Paul Kempfer, and William Feininger as inventors and was published on May 16, 2002. The Lu '577 publication is therefore prior art to the '243 patent —by nearly a decade—at least under 35 U.S.C. §§ 102(a) and 102(b). The Lu '577 publication is the publication of non-provisional U.S. patent Appl. No. 09/909,224, Filed on July 19, 2001. The Lu '577 publication generally relates to a television audience measurement system that measures viewing of a television program on a digital television. More specifically, the Lu '577 publication relates to measuring audiences of digitally broadcast television programming. Among other things, the Lu '577 publication discloses extracting an audio signature from the television program being watched in order to identify the television program. For example, the Lu '577 publication describes how an in-home audience measurement system can extract an audio signature (e.g., captured via a microphone)

from the programming being displayed on a television and, either locally or at a remote data collection facility, compare the signature to a set of reference signatures to identify the programming being displayed on the television. After the identification of the programming being displayed on the television (referred to as “tuning” information or data in the Lu ’577 publication) is determined the tuning information can be transmitted to a remote data collection central office. The Lu ’577 publication also discloses how it is well-known within the field of audience measurement systems to identify the members of a television viewing audience, such as an in-home audience viewing a digital television program. For example, the Lu ’577 publication describes using a “person identifier,” which may be a video camera, IR camera, or the like, that identifies the persons watching television programming on a digital television set. The Lu ’577 publication further describes how the person identifier may use head location and facial recognition software and techniques to identify the viewing persons and collecting other demographic data. This television audience data can then be transmitted (e.g., via the Internet) to a remotely located data collection central office.

The Lu ’577 publication is but-for material to the issuance of the ’243 patent and non-cumulative of other prior art considered and/or cited during prosecution in that, on information and belief, the Patent Office would not have allowed at least one claim of the ’243 patent—e.g., at least independent claims 1, 9, 16, and/or 22—had it been aware of the Lu ’577 publication. For example, claim 1 of the ’243 patent recites an “audience measurement system” comprising “memory,” “machine readable instructions,” and “processor circuitry to execute the machine readable instructions to” carry out certain steps. Those steps include “generat[ing] an audio signature of media content presented by a television within the media exposure environment” and “obtain[ing] content identifying data corresponding to the presented media content, the content identifying data based on the audio signature of the media content presented by the television within the media exposure environment.” The Lu ’577 publication discloses and/or renders obvious these limitations. For instance, the Lu ’577 publication discloses a “television audience measurement system” that “measures viewing of a television program viewed on digital

television located in a statistically selected site.” The Lu ’577 publication further discloses that exemplary embodiments of its system may include a “detector” that “may detect the audio portion of a program to which the digital television set 66 is tuned by non-intrusively detecting the sound provided by a speaker 72 of the digital television set 66 (in which case the detector 64 may be a microphone).” The Lu ’577 publication further discloses “extracting signatures from the audio portion of the television signal to which a receiver is tuned.” The Lu ’577 publication further discloses that the extracted signatures can be used “for subsequent comparison, either in the statistically selected monitoring site 62 or in the central office 90, with previously collected reference signatures in order to identify the television programs to which the digital television set 66 . . . [is] tuned.” The steps in claim 1 of the ’243 patent also include “analyz[ing] a sequence of images of the media exposure environment to detect a head appearing in one or more of the images, the sequence of images obtained by a camera while the media content corresponding to the content identifying data is presented by the television,” “determin[ing] an orientation of the head with respect to the camera,” and “determin[ing] audience identification information based on a match of the head to a known person associated with the media exposure environment.” The Lu ’577 publication discloses and/or renders obvious these limitations. For instance, the Lu ’577 publication discloses that, in exemplary embodiments of its system, “a person identifier 98 may be provided in order to identify the persons watching television programming on the digital television set 66.” The Lu ’577 publication further discloses: “The person identifier 98 may be video camera, an IR camera, or the like. When such equipment is available in the statistically selected monitoring site 62, the site unit 86 may employ known head location and face recognition software (e.g., as taught by Lu in U.S. Pat. No. 4,858,000) for the identification of the viewing persons and for the collection of other demographic data.” The Lu ’577 publication further discloses that “it is well known in the audience measurement arts to use computer-based image recognition in order to identify members of a viewing audience. Notable among teachings in this area is that by Lu in U.S. Pat. No. 4,858,000. The teaching of this patent is herein incorporated by reference.” Claim 1 of the ’243 patent further recites that the claimed “audience

measurement system” comprises “network interface circuitry to output a signal indicative of the content identifying data and the audience identification information to a data collection facility.” The Lu ’577 publication discloses and/or renders obvious this limitation. For instance, the Lu ’577 publication discloses that, in exemplary embodiments of its system, “television audience data from all the viewing sites in the statistically selected monitoring site 102 can be communicated, via the Internet, a public telephone system, or the like, to a locally located or remotely located intermediate data collector 128 and then to a remotely located central office 130 through a communication channel 170.” Claim 1 of the ’243 patent further recites that the “audience measurement system” comprises “memory,” “machine readable instructions,” and “processor circuitry to execute the machine readable instructions.” The Lu ’577 publication discloses and/or renders obvious these limitations as well. For instance, the Lu ’577 publication discloses that its system includes one or more processors, memories, and “software agent[s],” and software is understood to comprise machine readable instructions. The entire disclosure of the Lu ’577 publication is incorporated herein by reference.

***The Lu ’919 Publication***

As noted above, the Lu ’919 publication names Nielsen employees Daozheng Lu, Paul Kempter, and William Feininger as inventors and was published on January 24, 2002. The Lu ’919 publication is therefore prior art to the ’243 patent at least under 35 U.S.C. §§ 102(a) and 102(b).

The Lu ’919 publication is but-for material to the issuance of the ’243 patent and non-cumulative of other prior art considered and/or cited during prosecution in that, on information and belief, the Patent Office would not have allowed at least one claim of the ’243 patent—e.g., at least independent claims 1, 9, 16, and/or 22—had it been aware of the Lu ’919 publication. As noted above, the Lu ’919 publication is a divisional of the same application leading to the Lu ’577 publication (i.e., non-provisional U.S. patent application No. 09/076,517) and thus contains substantially the same disclosure as the Lu ’577 publication. Thus, the description and allegations set forth above of the Lu ’557 publication’s disclosure is incorporated by reference as

equally applicable to the Lu '919 publication. The entire disclosure of the Lu '919 publication is incorporated herein by reference.

\* \* \*

On information and belief, the material information and prior art discussed herein are non-cumulative of the prior art references submitted to or considered by the Examiner, because none of the references or information actually identified during prosecution disclosed the basic Nielsen audience measurement platform described above and/or did not constitute or qualify as prior art. To the extent a prior art Nielsen audience-measurement platform was disclosed, it lacked basic, critical features relevant to the '243 patent. For instance, U.S. Pub. Patent App. No. 2008/0271065 to Buonasera et al., which was one of the references identified during prosecution, discloses a TV-audience measurement systems but fails to disclose the features of audio-based content recognition, user identification and facial orientation determination. On information and belief, as described above, Christen Nielsen, Nielsen's in-house IP counsel, and Nielsen's outside prosecution counsel at Hanley, Flight & Zimmerman, LLP, knew of more relevant prior art than the Buonasera reference. Moreover, on information and belief, practically none of the prior art references of record disclose generating an audio signature of media content presented by a television within the media exposure environment in connection with the basic audience measurement platform, which was a feature known to and patented by Nielsen since at least the late 1980's, and literally none involve combined use of audio-based content recognition with use of cameras for user identification and head-orientation determination. Indeed, the references of record that come closest to disclosing the requisite features are a series of 11 prior Nielsen patents and patent application publications that name Christen Nielsen as an inventor but which, as discussed in more detail below, do not qualify as prior art because they claim priority to the same U.S. non-provisional application as the '243 patent (and are in fact identified in the chain of priority for the '243 patent). Similarly, U.S. Patent No. 8,620,088, issued to Lee, which was identified during prosecution of the '243 patent, also does not qualify as prior art even though it relates generally to audience measurement systems. For further example, at least the following

references identified during prosecution do not even relate to audience measurement systems: U.S. Patent No. 6,014,461, issued to Hennessey et al., which generally relates to “[a]n apparatus and method for automatic knowledge-based object or anomaly classification” that “captur[es] a pixel map of an image and from that generat[es] high level descriptors of the object or anomaly such as size, shape, color and sharpness”; U.S. Patent No. 7,440,593, issued to Steinberg et al., which generally relates to “[a] method of generating one or more new spatial and chromatic variation digital images us[ing] an original digitally-acquired image which include[es] a face or portions of a face”; U.S. Patent No. 7,602,524, issued to Eichhorn et al., which generally relates to “[a] system and method for processing and analyzing virtual microscopy digital images”; and U.S. Patent No. 7,796,154, issued to Senior et al., which generally relates to “[a] system for automatically acquiring high-resolution images by steering a pan-tilt-zoom camera at targets detected in a fixed camera view is provided.” The list goes on and on. Had any of the material but withheld information or prior art references discussed above been disclosed, their relevance would have been immediately obvious to the Examiner against the backdrop of the actually disclosed references that either did not relate to audience measurement systems at all or were not prior art. In addition, the withheld prior art references discussed above used some of the exact same language recited in the claims of the ’243 patent, such as “audio signature” and “audience measurement,” which would have provided a strong basis for the Examiner to reject at least the independent claims of the ’243 patent as unpatentable, especially because these references were Nielsen’s own prior patents and patent application publications.

As described above, it is apparent that at least Nielsen’s outside litigation counsel at Kelly, Drye & Warren, LLP believed and made an assessment that the independent claims of the ’243 patent are likely invalid given their decision not to assert these claims in this litigation. On information and belief, outside litigation counsel so believed and assessed at least several days before filing suit, and at least as early as while the ’243 patent was still being prosecuted. It is equally apparent that Nielsen’s in-house intellectual property counsel and outside patent prosecution counsel at Hanley, Flight & Zimmerman, LLP, such as James A. Flight, were aware

of and shared that belief and assessment because of the obvious, high degree of coordination between litigation and prosecution counsel via in-house intellectual property counsel.

Moreover, on information and belief, even Christen Nielsen was well aware at the time of filing of the application leading to the '243 patent that the technology claimed in at least the independent claims—namely, claims 1, 9, 16, and 22—was a basic, well-known audience measurement platform that was at least 10 years older than the December 2011 priority date claimed by the '243 patent. For example, on information and belief, Christen Nielsen has been employed by Nielsen for nearly 20 years, if not longer, and has worked extensively during that time on Nielsen's products, services, and intellectual property related to audience measurement systems. By way of example, Christen Nielsen is named inventor on international Patent Cooperation Treaty (PCT) patent application PCT/US2003/030370, filed by Nielsen on September 25, 2003, which, according to its specification, “relates generally to audience measurement, and more particularly, to methods and apparatus to detect an operating state of a display based on visible light.” By way of further example, Christen Nielsen is a named inventor on international PCT patent application PCT/US2004/012929, filed by Nielsen on April 26, 2004, which, according to its specification, “relates generally to audience measurement, and more particularly, to methods and apparatus to export tuning data collected in a receiving device.” By way of still further example, Christen Nielsen is also a named inventor on non-provisional U.S. patent application No. 11/916,511, which was filed by Nielsen on June 8, 2005, published as U.S. Patent Application Publication No. 2008/0271065 on October 30, 2008, and issued as U.S. Patent No. 7,631,324 on December 8, 2009, and which describes the basic audience measurement platform (emphases added):

Typically, recorded past historical media consumption (e.g., television viewing, radio listening, etc.) is used to estimate future media consumption. FIG. 1 illustrates a prior-art example electronic media rating system **100** that measures viewership for media events or shows displayed on an information presenting device such as a television **105**. ***To measure the viewership, the example electronic media rating system 100 includes a meter 110 (e.g., the Nielsen People Meter™ from Nielsen Media Research®) that records events or shows viewed by an audience member 115. . . .***

For locations in which more than one potential audience member may be present, the meter **110** can, in addition to recording the selected events and shows, record which audience member(s) were present during a selected event or show. . . . In some known examples, the meter **110** uses image recognition techniques to detect the presence of the audience member(s) **115**. To perform the image recognition techniques, the meter **110** includes an image processor **130** that is responsive to visible light reflected off of the audience member(s) **115**. The visible light might be created by the television **105** or by another visible light source **135** (e.g., a lamp, a light fixture, a window, a candle, etc.) present in a room. *Using one or a variety of well-known techniques, the image processor 130 captures signals representative of the reflected light and applies appropriate signal processing to the captured signals to identify a number of audience members present. In some examples, the image processor 130 may be capable to distinguish the audience member(s) 115 such that the identities of the audience member(s) 115 can be electronically determined and recorded.*

Thus, on information and belief, even Christen Nielsen was well aware at the time of filing of the application leading to the '243 patent that the technology claimed in at least the independent claims—namely, claims 1, 9, 16, and 22—was a basic, well-known audience measurement platform that was not patentable.

On information and belief, Christen Nielsen, prosecution counsel at Hanley, Flight & Zimmerman, LLC, and/or Nielsen's in-house intellectual property counsel were aware of the existence of the '514 patent during the prosecution of the '243 patent and were further aware of all aspects of the disclosure of the '514 patent relevant to patentability of the '243 patent. For example, as noted above, Christen Nielsen is a named inventor on the '514 patent. Accordingly, Christen Nielsen was aware of the entire disclosure of the '514 patent at all relevant times, including during prosecution of the '243 patent, because, on information and belief, as a named inventor, she reviewed the entire application leading to the '514 patent before it was filed, including the specification, figures, and claims. For further example, James A. Flight was responsible for prosecution of the '243 patent. Mr. Flight also participated in prosecution of the '514 patent before the Patent Office. For instance, Mr. Flight signed and filed a July 2, 2007, Information Disclosure Statement (IDS) during prosecution of the '514 patent. For further instance, Mr. Flight also signed and filed multiple IDSes during prosecution of the '514 patent, including on March 27, 2008, and April 9, 2008. On information and belief, based on his

involvement in and responsibility for prosecution of the '514 patent, Mr. Flight was aware of the entire disclosure of the '514 patent at all relevant times, including during prosecution of the '243 patent, because Mr. Flight could not have competently prosecuted the application leading to the '514 patent without being familiar with its entire disclosure, including the specification, figures, and claims.

On information and belief, Christen Nielsen, prosecution counsel at Hanley, Flight & Zimmerman, LLC, and/or Nielsen's in-house intellectual property counsel were also aware of the existence of the '372 publication during the prosecution of the '243 patent and were further aware of all aspects of the disclosure of the '372 publication relevant to patentability of the '243 patent. For example, as noted above, Christen Nielsen is a named inventor on the '372 publication. Accordingly, Christen Nielsen was aware of the entire disclosure of the '372 publication patent at all relevant times, including during prosecution of the '243 patent, because, on information and belief, as a named inventor, she reviewed the entire application that was published as the '372 publication (non-provisional U.S. patent Appl. No. 12/831,870) before it was filed, including the specification, figures, and claims.

On information and belief, Christen Nielsen, prosecution counsel at Hanley, Flight & Zimmerman, LLC, and/or Nielsen's in-house intellectual property counsel were also aware of the existence of the Lu '577 publication during the prosecution of the '243 patent and were further aware of all aspects of the disclosure of the Lu '577 publication relevant to patentability of the '243 patent. For example, as noted above, Christen Nielsen is a named inventor on the '514 patent and Mr. Flight participated in prosecution of the '514 patent before the Patent Office. The Lu '577 publication was identified and disclosed as prior art to the Patent Office during prosecution of the '514 patent before the Patent Office. Accordingly, on information and belief, at least Christen Nielsen and Mr. Flight were aware of the Lu '577 publication at all relevant times, including during prosecution of the '243 patent.

Rather than citing the above prior art references and information known to them to be material to patentability, Christen Nielsen, prosecution counsel at Hanley, Flight & Zimmerman,

LLC, and/or Nielsen’s in-house intellectual property counsel decided to submit a number of references that were not prior art in order to, on information and belief, give the appearance of fulfilling their duty of disclosure and misdirect the Examiner, which further shows intent to deceive. For example, an IDS filed on May 27, 2022, identified five prior Nielsen patents naming Christen Nielsen as inventor, all of which were clearly not prior art because they were part of the same family as the ’243 patent and claimed priority through the same series of continuation applications as the ’243 patent. Specifically, that IDS identified U.S. Patent Nos. 9,082,004, 9,560,267, 9,843,717, 10,165,177, and 11,245,839. All five of these patents issued from applications that are part of the priority chain for the ’243 patent—i.e., the ’243 patent claims priority to or through them—and are thus not prior art.

In addition, on information and belief, Christen Nielsen, prosecution counsel at Hanley, Flight & Zimmerman, LLC, and/or Nielsen’s in-house intellectual property counsel decided to take the unusual step of requesting “Track One” prioritized examination of the application for the ’243 patent. On information and belief, the request for “Track One” prioritized examination was intended by Christen Nielsen, prosecution counsel at Hanley, Flight & Zimmerman, LLC, and/or Nielsen’s in-house intellectual property counsel to minimize the Examiner’s opportunity to locate and thoroughly evaluate the withheld references and information, which further shows an intent to deceive. On information and belief, the step of requesting prioritized examination of the application for the ’243 patent was particularly unusual because Nielsen had not previously requested “Track One” prioritized examination for any of the applications in the priority chain of the ’243 patent. Specifically, on information and belief, based on the records available at the Patent Office, Nielsen did not request “Track One” prioritized examination for any of the following applications to or through which the ’243 patent claims priority: application No. 17/666,322, filed on Feb. 7, 2022; application No. 16/878,935, filed on May 20, 2020; application No. 16/196,810, filed on Nov. 20, 2018; application No. 15/793,108, filed on Oct. 25, 2017; application No. 15/419,120, filed on Jan. 30, 2017; application No. 14/732,175, filed on Jun. 5, 2015; application No. 13/327,227, filed on Dec. 15, 2011. For more than ten years,

Nielsen never considered it necessary to request “Track One” prioritized examination for any invention claimed in this series of applications, even though all of the purported inventions were based on the same exact disclosure. On information and belief, Christen Nielsen, prosecution counsel at Hanley, Flight & Zimmerman, LLC, and/or Nielsen’s in-house intellectual property counsel decided to seek “Track One” prioritized examination for the first time with the application for the ’243 patent because, on information and belief, their intent was to quickly obtain a set of claims that were as broad as possible to read on TVision’s accused instrumentalities while limiting the PTO’s time to appropriately consider the claim scope in light of the prior art.

Respectfully submitted,

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